Epidemiological profile of sickness absenteeism at Oswaldo Cruz Foundation from 2012 through 2016
Perfil epidemiológico do absenteísmo-doença na Fundação Oswaldo Cruz no período de 2012 a 2016

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ABSTRACT | Background: Accurate knowledge of the prevalence and profile of sickness absenteeism enables direct analysis of work environments and the health–disease process. Objective: To establish the prevalence and profile of sick leaves granted to Oswaldo Cruz Foundation (FIOCRUZ) employees from 2012 through 2016. Method: Cross-sectional study with analysis of variables sex, age range, age at onset of sick leave, job position, FIOCRUZ unit, leave type, ICD code, leave duration, number of leave extensions, and outcomes; p=0.05 and 95% confidence interval were considered in all the analyses. Results: Work accidents accounted for 2.30% of sick leaves; the absenteeism rate was 2.89%. Musculoskeletal diseases (21.2%), mental and behavioral disorders (13.1%) and consequences of external causes (11.3%) were the main reasons for sick leave. Mental and behavioral disorders exhibited the longest median leave duration (30 days). The odds of requiring a sick leave were highest among women (OR=4.08), employees with technical positions (OR=2.86), aged 25 to 34 years old (OR=2.68) or allocated to production units (OR=176.30) and hospitals (OR=34.05). Conclusions: We corroborate the relevance of accurate knowledge of aspects related to absenteeism for the planning of strategies to promote the functional capacity of workers, and reduce its consequences on the health–work–disease relationship. Keywords | absenteeism; sick leave; occupational health; public sector.

RESUMO | Introdução: Conhecer a prevalência e o perfil do absenteísmo por doença permite a análise indireta dos ambientes de trabalho e do processo saúde-doença. Objetivo: Estabelecer a prevalência e o perfil de licenças médicas na Fundação Oswaldo Cruz (FIOCRUZ), entre 2012 e 2016. Método: Realizou-se um estudo transversal, utilizando-se como variáveis sexo, faixa etária, idade no início do afastamento, cargo, unidade de trabalho, tipo de licença, CID, número de dias de afastamento, número de prorrogações e desfecho. Nas análises, um valor de p=0,05 e o intervalo de confiança de 95% (IC95%) foram sempre considerados. Resultados: A taxa de acidentes de trabalho foi de 2,30% do total de licenças e a de absenteísmo, de 2,89%. As desordens musculosqueléticas (21,2%), os transtornos mentais e comportamentais (13,1%) e as causas externas (11,3%) foram as principais causas de afastamento, e os transtornos mentais apresentaram a maior mediana de dias de afastamento (30,00). As mulheres (OR=4,08), os que ocupam cargos técnicos (OR=2,86), os trabalhadores na faixa etária de 25 a 34 anos (OR=2,68) e as unidades de produção (OR=176,30) e hospitais (OR=34,05) apresentaram as maiores chances de licença. Conclusões: Ratifica-se a importância do conhecimento sobre as questões relacionadas ao absenteísmo, de modo que estratégias de manutenção da funcionalidade dos trabalhadores e redução das consequências nas relações saúde-trabalho-doença possam ser encontradas. Palavras-chave | absenteísmo; licença médica; saúde do trabalhador; setor público.
INTRODUCTION

The contemporaneous world of work is associated with changes in the organization of work characterized by flexibilization and precariousness of the working conditions. Through several, direct (such as implementation of new technologies and automation) and indirect (via various social changes triggered by new and variable labor relations) strategies, such changes result in a type of society signaled by immediacy and non-stop, 24/7 functioning.

As a result, work is within an institutional framework which weakens collective bonds, reinforces fragility at the expense of characteristics such as autonomy and performance, enhances individualism, and encourages expected adjustments to changes needed to accomplish goals.

This is the current scenario of work. It involves forces and strategies which enable a type of subjectivity subjugated to disciplinary mechanisms and other forms of control of work and workers. Such forms of control often act beyond the workplace, leading to converging singularities and several forms of resistance, including absenteeism as a means to cope with unease at work.

Absence of workers from the work process is a highly relevant subject for several social fields, and mainly for work as such both in the public and private spheres. Analyses of absenteeism often focus on issues related to productivity loss and healthcare expenses of workers or their family, income reduction, and the cost of benefits. However, absenteeism might also be seen as an expression of job dissatisfaction, i.e. a mechanism of resistance against working conditions which cause discomfort or illness.

Absenteeism might derive from workers’ personal factors, such as missing work days or arriving late to work for justifiable reasons or not; legislation, such as vacation, marriage, birth, death and moving out leaves; disciplinary hindrances; and health issues.

Accurate knowledge of the reasons for and characteristics of sickness absenteeism enables indirect analyses of organizations, worksites and the health–disease process. The corresponding information reveals aspects directly related to health, and is essential for the planning of actions and implementation of public policies on work and health.

A focus on the public sector, the federal sphere in particular, evidences a shortage of studies on civil servants’ health. We could not find any reason for such scarcity, and hypotheses include difficult access to information, or plain lack of interest of organizations on their employees’ health.

Several studies found that mental and behavioral disorders and musculoskeletal diseases are among the main reasons for leave among federal, state or municipal civil servants. These data agree with the findings of studies on absenteeism relative to other economic sectors and in other countries, which point to musculoskeletal disorders as the most prevalent reason for sick leave worldwide, and that the frequency of mental disorders, occupational stress, anxiety, depression, and even suicide is increasing.

The aim of the present study was to investigate the prevalence and profile of sick leave among Oswaldo Cruz Foundation (Função Oswaldo Cruz — FIOCRUZ) employees from 2012 through 2016. Our hypothesis was that there are different patterns of sickness absenteeism as a function of worksites and labor relations at the various FIOCRUZ units — for teaching, research, management, healthcare (hospitals), drug and immunobiological agent production, among others. Our focus was on data useful to ground preventive and rehabilitation measures to preserve the functional capacity of employees, with impact on the maintenance of health and work as means of social inclusion and re-inclusion.

METHOD

There were 11,852 employees at FIOCRUZ — an institution affiliated with the Ministry of Health — in December 2016, including hired and outsourced workers.

Two different social security regimes apply at FIOCRUZ as a function of the workers’ employment relationship: the Single Juridical Regime (Regime Jurídico Único — RJU) for civil servants, regulated by Law no. 8,112/90, and the General Social Security Regime (Regime Geral de Previdência Social — RGPS) established by Law no. 8,213/91.

Both regimes include the possibility of sickness or disability leave. Relative to RJU, Law no. 8,112/90 articles 202, 203 and 204 define “leave to treat health problems,” and for RGPS, Law no. 8,213/91 §4 articles 59 and 60 establish the so-called “sick pay.”

We included 5,465 hired civil servants (RJU). Outsourced employees were excluded due to difficulties to collect data on leaves.
In the present cross-sectional, observational and descriptive study we analyzed data for the period from January 2012 through December 2016. Data were collected from the Unit of Legal Medical Examination and Health Functional Assessment (Núcleo de Perícia e Avaliação Funcional em Saúde–NUPAFS) of General Coordination of Personnel Management (Coordenação Geral de Gestão de Pessoas–COGEPE / FIOCRUZ).

In 2012 FIOCRUZ established the Public Servant Health Care Integrated Subsystem (Subsistema Integrado de Atenção à Saúde do Servidor–SIASS) which allows entering the results of medical legal examinations on a single electronic medical record, including clinical evaluation, ICD code, granted or not sick leaves, and leave onset and end dates. Medical legal experts should further state whether workers will be discharged or must be re-examined at the end of leaves, which characterizes sick leave extension. Upon becoming disabled for work due to disease, employees have the right to stay away from work. Employees granted sick leaves of up to five consecutive days do not need mandatory medical legal examination, provided diagnosis or the corresponding ICD is recorded. Starting on day six, medical legal examination by an individual physician or panel is mandatory according the suggested duration of sick leave. In the present study, analysis of the characteristics of sickness absenteeism was based on sick leaves granted following medical legal examination.

We defined “sick leave” as the time off from work granted on reports issued by medical legal experts. Sick leave extension (i.e., several consecutive sick leaves) were considered as a single one.

Possible leave outcomes were:

- discharge, including return to work, voluntary retirement or death during sick leave;
- disability retirement;
- extended leave, when leaves extended into 2017.

In analysis we considered variables sex, age range, year when sick leave took place, age at onset of leave, job position, FIOCRUZ unit, leave type, onset of leave before the study period (2012), code of disease according to the International Statistical Classification of Diseases and Related Health Problems, 10th edition (ICD-10) reported by medical legal experts, leave duration (days), number of extensions, and outcome.

The analyzed employees had the following positions within the current FIOCRUZ career plan: “public health researcher,” “public health technologist,” “health management analyst,” “public health technician,” or “health management technical assistant”—the latter two require just an intermediate educational level. The positions of employees included in the older career plan were equated to match the five aforementioned categories.

For calculation of prevalence ratios according to FIOCRUZ unit we selected the technical–scientific units with the largest number of employees, and to analyze all the technical-managerial units (General Coordination of Administration, Personnel Management, Campus Infrastructure, and Strategic Planning) as a single one. Therefore the technical–scientific units considered were: Biomanguinhos (immunobiological agent production); Sergio Arouca National Public Health School (Escola Nacional de Saúde Pública–ENSP; teaching, research, services, technological and scientific development); Fernandes Figueira National Institute of Women’s, Child and Adolescent Health (IFF; healthcare delivery, teaching, research, and technological development); Evandro Changas National Institute of Infectious Diseases (Instituto Nacional de Infectologia–INI; clinical research, teaching, healthcare provision to patients with infectious diseases); National Institute of Health Quality Control (Instituto Nacional de Controle de Qualidade em Saúde–INCQS; teaching, research, laboratory technologies for control of the quality of inputs, products, environments and services subjected to the Health Surveillance authority); and Oswaldo Cruz Institute (Instituto Oswaldo Cruz–IOC; teaching, technological development, innovation, reference services, biological collections).

We first performed descriptive analysis to characterize the employees’ profile, as well as that of the employees who required sick leave, according to the variables of interest. The Kruskal–Wallis test was used to analyze differences per age range and sex. Prevalence ratios were calculated as crude odds ratio (OR) for association analysis of outcomes.

For the purpose of analysis, we considered that all the analyzed employees worked 8 hours / day. Equation 1 was used to calculate absenteeism rates:

\[
\text{Abs} = \frac{\text{number of days off work for health reasons} \times 8 \text{ hrs.}}{\text{Number of employees} \times \text{number of working days} \times 8 \text{ hrs.}} \times 100
\]
Information on ICD code lacked for 56 (2.3%) events, which were thus excluded from analysis.

Analysis was performed with Statistical Package for the Social Sciences (SPSS) 20.0 for Windows® (SPSS Inc., Chicago, USA). The Kolmogorov-Smirnov test did not evidence a normal distribution of the data. Descriptive statistics included calculation of absolute and relative frequencies and median. The significance level was set to p=0.05 with 95% confidence interval (95% CI).

The present study is a part of a research project approved by the institutional research ethics committee on 25 May 2017, CAAE 65658617.4.0000.5240.

RESULTS

We included 5,465 FIOCRUZ employees, most of whom were female (56.1%). The analysis of outcome median age of the sample was 49 years old, and was similar for both sexes, women 48 and men 49 years old.

A total of 2,476 sick leaves were granted for the analyzed population from 2012 through 2016, 25 (1.0%) of which had begun before 2012, and 40 extended into 2017.

Leaves were also characterized per type. The vast majority of leaves (97.7%) were granted for treatment of health problems unrelated to work, and 2.3% were categorized as leaves for treatment of work accidents, i.e. with causal link to work demonstrated on medical legal examination. The distribution of leaves per type and year is described in Table 1. There were 405 cases of leave extension—additional leaves granted by medical legal experts—corresponding to 16.4% of the total number of leaves. The median number of extensions was 2. On analysis of outcome disability retirement alone, this number increased to 5.

In regard to outcomes, 96.0% of leaves ended in discharge with return to work, 2.4% in disability retirement, and 1.6% extended into 2017.

We performed descriptive statistics to establish the relationship between age and sick leave. The median age of employees who required sick leave was 48 years old, 25th and 75th percentiles 38 and 55, respectively.

About 76.0% of leaves were granted to women, and only 24.0% to men. The largest proportion of leaves were granted to employees aged 45 to 54 years old (Table 2); this distribution remained also on analysis per sex.

We found difference in the frequency of leaves per age range among the men (p<0.010) which was not the case among women.

The prevalence ratio according to sex was 4.08 (95% CI 3.64–5.58). The highest OR corresponded to age range 25 to 34 years old compared to age range 35 to 44, which comprised the highest absolute number of employees, as shown in Table 3.

Analysis of prevalence according to job position (Table 3) showed that the odds for researchers to require a sick leave were lower compared to technologists (OR=0.16; 95% CI 0.14–0.21). The highest odds corresponded to technicians (OR=2.86; 95% CI 2.48–3.31).

Analysis of prevalence per FIOCRUZ unit evidenced a significantly higher proportion of leaves among employees allocated to production units and hospitals, Biomanguinhos in particular (OR=176.3; 95% CI 77.58–400.64) (Table 3).

Table 1. Distribution of sick leaves per type and year, Oswaldo Cruz Foundations units, Brazil, 2012-2016 (n=2,476).

<table>
<thead>
<tr>
<th>Type</th>
<th>Work accidents</th>
<th>Medical treatment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total n</td>
<td>192</td>
<td>546</td>
<td>512</td>
</tr>
<tr>
<td>%</td>
<td>78</td>
<td>221</td>
<td>207</td>
</tr>
</tbody>
</table>

Table 2. Distribution of work accidents per study center, Oswaldo Cruz Foundations units, Brazil, 2012-2016 (n=2,476).

<table>
<thead>
<tr>
<th>Study center</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>140</td>
<td>123</td>
<td>70</td>
<td>105</td>
<td>561</td>
<td>1000</td>
</tr>
<tr>
<td></td>
<td>76</td>
<td>22.3</td>
<td>210</td>
<td>219</td>
<td>272</td>
<td>1000</td>
</tr>
</tbody>
</table>

Table 3. Distribution of sick leaves per age range and sex, Oswaldo Cruz Foundations units, Brazil, 2012-2016 (n=2,476).

<table>
<thead>
<tr>
<th>Age range</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-34 years</td>
<td>1000</td>
<td>14.0</td>
</tr>
<tr>
<td>35-44 years</td>
<td>1000</td>
<td>12.3</td>
</tr>
<tr>
<td>45-54 years</td>
<td>1000</td>
<td>7.6</td>
</tr>
<tr>
<td>55-64 years</td>
<td>1000</td>
<td>7.8</td>
</tr>
<tr>
<td>&gt;64 years</td>
<td>1000</td>
<td>7.8</td>
</tr>
</tbody>
</table>
The duration of sick leaves considerably varied as a function of the analyzed outcomes. Leaves lasted a median of 450 days in the cases which ended in disability retirement, versus 15 days for all outcomes together (Table 4).

The impact of sick leaves was estimated as sickness absenteeism percentage, which value was 2.9% for the entire analyzed period.

According to distribution per ICD-10 code, the most frequent causes for leave were musculoskeletal disorders (M00–99), 21.2%, followed by mental and behavioral disorders–MBD (F00–99), 13.1%, and consequences of external causes (S00–99), 11.3%).

Deforming dorsopathies (M40–54) accounted for 48.8% of leaves due to musculoskeletal disorders, followed by soft tissue disorders (M60–79), 27.6%, and arthropathies (M00–25).

About 55.6% of leaves due to MBD corresponded to mood disorders, 45.3% of them caused by depressive episodes, and 34.5% by anxiety, dissociative, stress–related, somatoform and other nonpsychotic mental disorders.

Injuries to the ankle and foot (S00–99), wrist, hand and fingers (S60–69) and knee and lower leg (S80–89) accounted for 38.8%, 19.4% and 18.2%, respectively, of leaves due to consequences of external causes.

Among the main causes of sick leave, the longest median duration corresponded to MBD (30), followed by consequences of external causes (21) and musculoskeletal disorders (15).

### DISCUSSION

Upon considering only leaves granted following medical legal examination, we excluded those granted on administrative grounds—sick leaves of up to five days provided the corresponding ICD–10 is informed. This decision might be characterized as a limitation, since the number of leaves granted and the total number of days off work were underestimated, possibly resulting in a lower sickness absenteeism percentage.

The shortage of studies on the health and work of federal civil servants, and the fact the available ones were performed in different places and periods hinder comparisons of results, since objectives, statistical analysis and analyzed populations differ considerably. Then, many studies focused on particular categories, such as nursing professionals, at the expense of others.

Females (56.1%) predominated among FIOCRUZ employees, as is also the case of other Brazilian public institutions, as e.g. municipal institutions in Goiania (52.0%), a state bank in Minas Gerais (60.4%) and civil servants in Santa Catarina (75.9%). This scenario is the opposite to the current situation of women in the Brazilian and global labor market. According to the Continuous National Household Survey (Pesquisa Nacional de Amostras por Domicílio Continua–PNAD) women represented 42.8% of the Brazilian workforce in 2017.

The female predominance found in the present study might be due to how candidates are selected for civil servant positions, namely, through public calls, in which sex is not considered as a differential factor, and thus odds are equal between both sexes. Then, one should consider the value attributed to technical knowledge and academic training, in addition to the skills and competencies specific for each particular job position. For this reason, the odds of women to be hired might be higher, since they attend formal schooling longer than men, resulting in a higher proportion of women among civil servants.

According to the International Labor Organization (ILO) sex inequality is a global phenomenon: the proportion of men in the labor market is 26% higher compared to women. Inequality is stronger in North Africa and the Arab countries.
### Table 3. Distribution of Oswaldo Cruz Foundation (FIOCRUZ) employees per sex, age range, job position and unit according to sick leave occurrence, Oswaldo Cruz Foundations units, Brazil, 2012–2016 (n=2,476).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sick leave</th>
<th>OR</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No (%)</td>
<td>Yes (%)</td>
<td></td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1,869 (76.4)</td>
<td>576 (23.6)</td>
<td>4.08</td>
</tr>
<tr>
<td>Female</td>
<td>1,464 (44.3)</td>
<td>1,842 (55.7)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Age range (years)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>13 (76.5)</td>
<td>4 (23.5)</td>
<td>0.61</td>
</tr>
<tr>
<td>25-34</td>
<td>204 (37.7)</td>
<td>337 (62.3)</td>
<td>3.27</td>
</tr>
<tr>
<td>35-44</td>
<td>1,224 (66.4)</td>
<td>618 (33.6)</td>
<td>1</td>
</tr>
<tr>
<td>45-54</td>
<td>777 (476)</td>
<td>856 (52.4)</td>
<td>2.18</td>
</tr>
<tr>
<td>55-64</td>
<td>1,110 (66.1)</td>
<td>568 (33.9)</td>
<td>1.01</td>
</tr>
<tr>
<td>≥65</td>
<td>311 (77.0)</td>
<td>93 (23.0)</td>
<td>0.59</td>
</tr>
<tr>
<td><strong>Position</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Researchers</td>
<td>965 (89.3)</td>
<td>115 (10.7)</td>
<td>0.16</td>
</tr>
<tr>
<td>Technologists</td>
<td>1,179 (58.6)</td>
<td>832 (41.4)</td>
<td>1</td>
</tr>
<tr>
<td>Analysts</td>
<td>408 (496)</td>
<td>415 (50.4)</td>
<td>1.44</td>
</tr>
<tr>
<td>Technicians</td>
<td>445 (331)</td>
<td>901 (66.9)</td>
<td>2.86</td>
</tr>
<tr>
<td>Assistants</td>
<td>278 (56.6)</td>
<td>213 (43.4)</td>
<td>1.09</td>
</tr>
<tr>
<td><strong>Units</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative</td>
<td>1,546 (83.6)</td>
<td>304 (16.4)</td>
<td>1</td>
</tr>
<tr>
<td>Biomanguinhos</td>
<td>6 (2.8)</td>
<td>208 (97.2)</td>
<td>176.3</td>
</tr>
<tr>
<td>ENSP</td>
<td>431 (621)</td>
<td>263 (379)</td>
<td>3.01</td>
</tr>
<tr>
<td>IFF</td>
<td>115 (130)</td>
<td>770 (870)</td>
<td>34.05</td>
</tr>
<tr>
<td>INI</td>
<td>69 (216)</td>
<td>251 (784)</td>
<td>18.8</td>
</tr>
<tr>
<td>INCQS</td>
<td>82 (366)</td>
<td>142 (634)</td>
<td>8.81</td>
</tr>
<tr>
<td>IOC</td>
<td>443 (673)</td>
<td>211 (32.3)</td>
<td>2.42</td>
</tr>
</tbody>
</table>

OR: odds ratio; 95% CI: 95% confidence interval; ENSP: Sergio Arouca National Public Health School; IFF: Fernandes Figueira National Institute of Women’s, Child and Adolescent Health; INI: Evandro Chagas National Institute of Infectious Diseases; INCQS: National Institute of Health Quality Control; IOC: Oswaldo Cruz Institute.

### Table 4. Sick leave duration (days) per leave outcome, Oswaldo Cruz Foundations units, Brazil, 2012–2016 (n=2,476).

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Number of leaves</th>
<th>%</th>
<th>Median (days)</th>
<th>n (days)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retirement</td>
<td>60</td>
<td>2.4</td>
<td>450</td>
<td>119,510</td>
<td>77/5</td>
</tr>
<tr>
<td>Discharge</td>
<td>2,376</td>
<td>96</td>
<td>15</td>
<td>28,294</td>
<td>18.3</td>
</tr>
<tr>
<td>Extension</td>
<td>40</td>
<td>1.6</td>
<td>127</td>
<td>6,424</td>
<td>4.2</td>
</tr>
<tr>
<td>Total</td>
<td>2,476</td>
<td>100</td>
<td>15</td>
<td>154,228</td>
<td>1000</td>
</tr>
</tbody>
</table>

in which public policies and social rights differ according to sex. Also job positions, occupations and labor relations vary as a function of sex. For instance, women predominate in jobs related to elementary education or involving activities which require focus and care. An example of this situation is the predominance of women, 93.6%, in the basic health network of Campinas, Brazil14,18.

Age range 40 to 50 years predominated in several studies, thus similar to the median of 49 years of age found in the present study. Median age 49 years old was also reported for bank employees in Minas Gerais, Brazil, while the age range of municipal civil servants requiring sick leave in Goiania, Brazil, was 41 to 50, and the mean age of employees at the State Secretariat of Health of Sao Paulo, Brazil, 45 years old4,16,17.

Sick leave due to work accidents represented 2.3% of the total, thus quite lower than the rate of accident–related benefits granted by the National Social Insurance Institute (Instituto Nacional do Seguro Social–INSS) of Bahia, Brazil, 7.3%. While the total rate of benefits granted by INSS in 2016 was 9.3%, given the magnitude and diversity of activities insured by INSS, comparisons require caution and discrimination of activities and their inherent risk19,20.

The prevalence of sick leave was four times higher for the women (OR=4.08). Similar results were reported for nursing professionals at three public hospitals in Rio de Janeiro, Brazil, with a prevalence of 1.8, and in a municipal public service in Goiania, with prevalence of 1.3 to 5.1. These findings might be accounted for by social, psychological and biological factors which make women seek treatment more often than men. Indeed, women seek healthcare services 1.9 times more than men21. In addition, women tend to have longer working hours, including double burden, besides all aspects related to the work–family relationship17,22.

Sick leaves were more frequent among employees within the most economically productive age range, 24 to 54 years old. More in particular, the predominant age range was 25 to 34 years, and thus different from that reported in other studies, 45 to 54 years old15,17,23.

Employees allocated to technical positions exhibited the highest sick leave rates. The proportion of leaves was higher for FIOCRUZ units devoted to production — with factory–like characteristics — and hospitals compared to the administrative and teaching units4,15,24.

Leave duration is a relevant variable in regard to health and management of organizations, including social security institutions. The median leave duration found in the present study, 15 days, agrees with that reported for municipal civil servants in Goiania, 7 to 30 days27.

The median leave duration was 30 times higher when outcome was disability retirement, which points to the relevance of accurate knowledge of the profile of absenteeism to implement preventive and health promotion actions targeting workers.

The longest median leave duration per ICD code corresponded to accidents (120 days), neoplasms (60) and MBD (30). In a study conducted with civil servants in Goiania, the median leave duration was higher (30 days) for mental disorders, neoplasms, metabolic and neurologic diseases17.

The rate of absenteeism was 2.9% for the entire analyzed period, and thus similar to that reported for employees at the State Secretariat of Health of Sao Paulo (2.8%), an emergency / urgent care hospital in Belo Horizonte, Brazil (2.1%), the Unified Health System network of Campinas (2.9%) and civil servants at the Municipal Government of Porto Alegre, Brazil (3.9%)4,18,25,26.

While the most frequent causes of sick leave according to ICD–10 codes were similar, their order of frequency might vary among studies. Musculoskeletal disorders (23.0%) were the most frequent cause of sick leave for employees of a state bank, followed by MBD (15.4%)16. MBD (39.6%) were the most frequent reason of sick leave among civil servants at the Municipal Government of Porto Alegre16.

Consequences of external causes (29.7%) and MBD (29.5%) were the main reason for absenteeism among employees of a federal public university, followed by musculoskeletal disorders (11.6%)27. Similar patterns — with alternation of MBD and musculoskeletal disorders as main reasons — were reported in other studies15,17,23,28,30.

CONCLUSION

Sickness absenteeism results from the interaction of several factors. Our results point to higher frequency among women. The frequency of sick leave was lower among employees allocated to job positions which require higher educational levels, while workers who perform operational and care delivery tasks seem to be more vulnerable.
Chronic non-communicable diseases were among the main causes of absenteeism, depressive disorders in particular. Accurate knowledge of the morbidity profile and aspects leading to sick leave enable the planning of actions for promotion of healthy workplaces, disease prevention, timely detection and treatment. Such measures are related to the value attributed to health and the functional capacity of workers, and allow reducing the rate of early retirement. Special attention should be paid to interventions whenever long and frequently renewed leaves are detected.

Consideration of a broader scope of work process indicators is needed, and the design of studies should include aspects such as presenteeism, labor relations in highly competitive work environments, submission to productivity–enhancing measures enabled by the flexibilization of the work process, harsh demands to accomplish goals, and imposition of standards on the performance of tasks. The fact we live in a highly connected society — which makes the control of workers easy not only during working hours, but also away from work and on vacation — is a factor to be taken into account.

The public administration should improve its approach to labor relations and the state of health of workers by going beyond its concern with costs, to include the perspective of functional capacity and effectiveness in association with well-being. Such attitude seems to require a new view of work in its comprehensive and multidimensional aspects, including the psychological and physical well-being of workers. The promotion of healthy workplaces, disease prevention, and planning of actions for early retirement are measures that can be undertaken in this perspective. Additionally, policies to develop a more pluralistic and participatory culture in workplaces are needed, as well as an improved way of organizing and imposing standards on the performance of tasks. The public administration should improve its approach to labor relations and the state of health of workers by going beyond its concern with costs, to include the perspective of functional capacity and effectiveness in association with well-being. Such attitude seems to require a new view of work in its comprehensive and multidimensional aspects, including the psychological and physical well-being of workers. The promotion of healthy workplaces, disease prevention, and planning of actions for early retirement are measures that can be undertaken in this perspective. Additionally, policies to develop a more pluralistic and participatory culture in workplaces are needed, as well as an improved way of organizing and imposing standards on the performance of tasks.

CONFLICT OF INTERESTS

Our employment relationship with the institution analyzed in the present study might represent a possible instance of conflict of interest. We complied with all ethical requirements for research involving human beings.

REFERENCES


